

CLAIMS:

1. A medical device for controlled release of one or more substances into a body cavity containing an electrolytic fluid comprising:

- 5 (a) a power supply having first and second terminals;
- (b) a plurality of blister-like vesicles mounted on a first surface, each vesicle having at least a metallic portion formed from a first metal;
- (c) for each vesicle, an electrical connection between the metallic portion of the vesicle and the first terminal of the power supply, each
10 connection including a switch so as to allow the metallic portion to function as an anode when the switch is closed; and
- (d) A cathode formed from a second metal attached to the second terminal of the power supply;

wherein the cathode is separated from the anodes by a space that is
15 assessable by the electrolytic fluid when the device is in the body cavity.

2. The device according to Claim 1 further comprising a processor configured to close one or more switches at one or more predetermined times.

3. The device according to Claim 1 further comprising one or more magnetizable particles.

20 4. The device according to Claim 1 wherein the switches are closed by means of a remote control.

5. The device according to Claim 1, wherein the body cavity is a urinary bladder or a digestive tract organ.

6. The device according to Claim 1 wherein the anodes are formed from
25 copper and the cathode is formed from zinc.

7. The device according to Claim 1 further comprising an inflatable balloon.

8. The device according to Claim 7, wherein the balloon is formed with a magnetizable portion.

9. The device according to Claim 7 or 8 in which the balloon further comprises
30 a self-sealing valve.

10. The device according to any one of Claims 7 to 9, wherein the device after inflation of the balloon floats in the electrolytic fluid.
11. The device according to any one of Claims 7 to 9, wherein the device after inflation of the balloon sinks in the electrolytic fluid.
- 5 12. The device according to any one of the previous claims wherein one or more of the one or more substances are drugs or antibiotics.
13. The device according to any one of the previous claims wherein one or more of the one or more substances are radioactive substances.
14. The device according to any one of the previous claims, further comprising
10 one or more monitoring devices for parameters in the body cavity.
15. The device according to Claim 14, wherein one or more of the one or more of the monitoring devices monitors a parameter of the body cavity selected from the list comprising:
- (a) pressure of the electrolytic fluid;
 - 15 (b) temperature of the electrolytic fluid;
 - (c) density of the electrolytic fluid; and
 - (d) composition of the electrolytic fluid.
16. The device according to Claim 14 or 15 further comprising a processor configured to receive data from a monitoring device and to close one or more
20 switches when under predetermined conditions in the body cavity.
17. A system for treating a body cavity of an individual, the system comprising:
- (a) a device according to any one of the previous claims; and
 - (b) an applicator for inserting the device into the body or for removing the device from the body cavity, the applicator fitted at an end thereof
25 with a gripping device for releasably gripping the device;
18. A system for treating a body cavity of an individual, the system comprising:
- (a) a device according to any one of Claims 7 to 16;
 - (b) an applicator for inserting the device into the body or for removing the device from the body cavity, the applicator fitted at an end thereof
30 with a gripping device for releasably gripping the device; and

(c) an inflating device for inflating the balloon.

19. The system according to Claim 17 or 18 further comprising a magnetizable displacing member for displacing the device within the body cavity.

20. The system according to any one of Claims 17 to 19, further comprising an
5 immobilizing member comprising a magnetizable portion, said immobilizing member being secured onto the individual's body for immobilizing the device at a desired location in the body cavity.

21. The system according to Claim 20, wherein the immobilizing member is in the form of a hygienic pad configured to be placed in a garment of the individual.

10 22. The system according to any one of Claims 17 to 21, wherein the gripping device comprises flanges.

23. The system according to any one of Claims 17 to 22, wherein the gripping device comprises a magnetizable portion.

24. The system according to Claim 18, wherein the inflating device comprises
15 an injector for injecting a fluid into the balloon so as to expand the balloon.

25. A method for releasing one or more substances into a body cavity containing an electrolytic fluid of an individual comprising the steps of:

- (a) loading the one or more substances into the vesicles of a device according to any one of Claims 1 to 16;
- 20 (b) inserting the device into the body cavity;
- (c) expanding the balloon in the urinary bladder; and
- (d) displacing the balloon within the urinary bladder to a desired location.

26. A method for releasing one or more substances into a body cavity containing
25 an electrolytic fluid of an individual comprising the steps of:

- (a) loading the one or more substances into the vesicles of a device according to any one of Claims 7 to 11;
- (b) inserting the device into the body cavity; and
- (c) expanding the balloon in the body cavity.

27. The method according to Claim 25 or 26 further comprising displacing the device within the body cavity to a desired location.

28. The method according to any one of Claims 25 to 27 wherein one or more of the one or more substances are selected from the list comprising:

- 5 (a) drugs;
- (b) immunoglobulins
- (b) antibiotics; and
- (c) radioactive substances.